

| In re Divisional Application of: | |) Atty. Docket: SUGI0069 |
|----------------------------------|--|---------------------------|
| Tadahiro OHMI et al. | |) |
| Serial No. 09/783,287 | |) Group Art Unit: 1763 |
| Filed: February 15, 2001 | |) |
| For: | METHOD FOR GENERATING MOISTURE, REACTOR FOR GENERATING MOISTURE, METHOD FOR CONTROLLING |)) Examiner: Unknown) |
| | TEMPERATURE OF REACTOR FOR GENERATING MOISTURE, etc. |)) Date: June 19, 2001) |

AMENDMENT (B)

ATTN.: Initial Patent Exam. Division Customer Service Center

Assistant Commissioner for Patents Washington, D. C. 20231

Sir:

In response to the Notice to File Corrected Application Papers dated May 31, 2001 (copy attached), please amend the above-captioned application as follows:

IN THE SPECIFICATION:

At page 69, please replace the section entitled ABSTRACT OF THE DISCLOSURE with the following:

REMARKS

With the above amendments, the Abstract has been shortened in length to conform to 37 C.F.R. 1.72(b). A marked-up version of the Abstract showing the changes made is attached for the convenience of the Examiner.

In view of the above, it is believed that the application is now in good condition for examination. Questions are welcomed by the below-signed attorney for applicants.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

ABSTRACT OF THE DISCLOSURE

The invention further reduces a size and cost of a reactor for generating water from oxygen and hydrogen, provides high purity water in an amount necessary for practical use safely, stably and continuously, and allows a platinum-coated catalyst layer formed on an inner wall of a reactor body to maintain high catalytic activity over a long period of time. Specifically, the reactor comprises A reactor comprising a body made of a heat-resistant material and having an inlet and an outlet for water/moisture gas, has having a gas-diffusing member provided in an internal space of the body, and has having a platinum coating on an internal wall surface of the body. Hydrogen and oxygen fed from the inlet is are diffused by the gas-diffusing member and then comes into contact with the platinum coating to enhance reactivity, thereby producing water from hydrogen and oxygen. A temperature of the reactor for generating moisture, wherein hydrogen is reacted with oxygen at a high temperature to generate moisture, is held to be below an ignition temperature of hydrogen or a hydrogencontaining gas so that hydrogen is reacted with oxygen while preventing explosive combustion of hydrogen and oxygen. The platinum-coated catalyst layer on the internal wall of the reactor body is formed by treating the surface of the internal wall of the body, cleaning the treated surface, forming a barrier coating of a nonmetallic material of an oxide or nitride on the wall surface, and forming the platinum coating on the barrier coating.